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10/798,783

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Tohru Mamata

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EXAMINER

KARIMI, PEGEMAN

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/798,783 | Applicant(s) MAMATA, TOHRU | |
| | Examiner PEGEMAN KARIMI | Art Unit 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-20 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 19, 23, 24, 26-28 and 30 is/are rejected.
- 7) ☒ Claim(s) 20, 25, 29, and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 09/22/2008 has been entered and considered by the examiner.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 18, 19, 23, 24, 26-28, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Weindorf (U.S. Patent No. 2002/0118182).

As to claim 18, Weindorf teaches an information processing device (100) comprising:

- a display unit (104) having changeable display brightness ([0038], lines 1-3);
- a detector (114, logarithmic sensor) configured to detect a lightness of surroundings ([0029], lines 1-3);
- a calculating unit (microprocessors of brightness control system) configured to calculate a target display brightness of the display unit based on the surrounding lightness detected by the detector (brightness control system adjusts the brightness automatically in response to changes in ambient light ([0038], lines 1-3), these automatic luminance control using precalculated table, but the microprocessors of brightness control system have sufficient processing power to provide these calculations in real time ([0051], lines 7-12);

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a selector (344) configured to select one of a first mode and a second mode (day mode or night mode, [0070], lines 1-8); and

a brightness control unit (320) configured to supply a brightness control signal for changing a current display brightness to the display unit (adjusting the display luminance of the display panel, [0030], lines 1-13) when the current display brightness does not equal the target display brightness (the adjustment of brightness is based upon the capability of a human eye to perceive changes, therefore it can be understood that the current display brightness is not the same as the targeted brightness because the adjustment can be detected by a human eye),

wherein, when the first mode is selected (day mode), the brightness control unit supplies a first brightness control signal (the automatic day luminance) changing the current display brightness by a predetermined brightness (e.g. changing the current display brightness from 82.95nits at step 2 to 86.62nits at step 3, which is a change of 3.67 nits) which is smaller than a difference between the current display brightness and the target brightness (the change of 3.67 nits is smaller than the difference between the logarithmic amplifier of step 2 at 34 and step 3 at 38 points, wherein the difference is 4 points), and

when the second mode is selected (night mode), the brightness control unit supplies a second brightness control signal (the automatic night luminance) changing the current display brightness by the difference (at night mode the change in brightness is in accordance with the change of 4 points in the logarithmic value of TABLE 1).

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As to claims 19 and 24, Weindorf teaches an input unit configured to input a selection one of the first mode and the second mode upon a user operation ([0069], lines 1-5).

As to claim 23, Weindorf teaches a method of controlling brightness of an information processing device (controlling the brightness of device 100) having a display unit (104) with changeable display brightness ([0038], lines 1-3), the method comprising:

detecting a lightness of surroundings ([0029], lines 1-3, detecting the lightness of the surrounding with device 114);

calculating a target display brightness of the display unit based on the detected surrounding lightness (brightness control system adjusts the brightness automatically in response to changes in ambient light ([0038], lines 1-3));

selecting one of a first mode and a second mode (selector 344 selects between a data mode or night mode, [0070], lines 1-8); and

supplying a brightness control signal for changing a current display brightness to the display unit (adjusting the display luminance of the display panel, [0030], lines 1-13) when the current display brightness does not equal the target display brightness (the adjustment of brightness is based upon the capability of a human eye to perceive changes, therefore it can be understood that the current display brightness is not the same as the targeted brightness because the adjustment can be detected by a human eye),

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wherein, when the first mode is selected (day mode), supplying a first brightness control signal (the automatic data luminance) changing the current display brightness by a predetermined brightness (e.g. changing the current display brightness from 82.95 nits at step 2 to 86.62 nits at step 3, which is a change of 3.67 nits) which is smaller than a difference between the current display brightness and the target brightness (the change of 3.67 nits is smaller than the difference between the logarithmic amplifier of step 2 at 34 and step 3 at 38 points, wherein the difference is 4 points), and

when the second mode is selected (night mode), supplying a second brightness control signal (the automatic night luminance) changing the current display brightness by the difference (at night mode the change in brightness is in accordance with the change of 4 points in the logarithmic value of TABLE 1).

As to claims 26, Weindorf teaches the changing unit (brightness control system) sets the display brightness of the display unit ([0038], lines 1-7) to a first brightness level (e.g. 117.31 nits, Step 10) when a first lightness level is detected (when the detected light is at $2.68\text{E-}08$) by the detector (114) and to a second brightness level (e.g. 145.69 nits, Step 15) when a second lightness level is detected (when the detected light is at $5.58\text{E-}08$) by the detector, and

the display brightness is changed from the first brightness level (brightness of step 10) to a third brightness level (e.g. brightness at step 12, 127.93 nits) which is between the first brightness level and the second brightness level (the third brightness level is located between step 10 and 15) and then from the third brightness level to the

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second brightness level (e.g. brightness of step 12) when the display brightness is changed from the first brightness level to the second brightness level (when the brightness is changed from step 10, the first brightness, to step 15, the second brightness, it will step through step 12, the third brightness), ([0070], lines 15-16).

As to claims 27, Weindorf teaches the display brightness is changed from the first brightness level (e.g. first brightness level is at step 10) to the third brightness level (e.g. third brightness level is at step 12) and then from the third brightness level to the second brightness level after a lapse of a predetermined time period (delay period), ([0072], lines 13-16).

As to claim 28 and 30, Weindorf teaches the predetermined brightness (the brightness difference between steps) is obtained by dividing a brightness range of the changeable display brightness with a predetermined number (e.g. the brightness in TABLE 1 starts from 66.79 nits to 511.79 nits. The luminance is divided and broken down into 48 steps for automatic day mode).

Allowable Subject Matter

3. Claims 20, 25, 29, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 09/22/2008 have been fully considered but they are not persuasive.

Applicant argues that Weindorf '182 clearly fails to suggest each and every element of claim 18 including, for example suggesting "calculating a target display brightness". Examiner respectfully disagrees with the applicant. Examiner would like to point out that in paragraphs [0038], lines 1-3 and [0051], lines 7-12 of Weindorf '182 teaches a brightness control system that can adjust the day time brightness automatically in response to changes in ambient light. Weindorf in paragraph 51 teaches the brightness control system has sufficient processing power to provide these calculations in real time, wherein microprocessors of brightness control system are used to provide this calculation. Therefore it is clear that the brightness control system can calculate the brightness levels using microprocessors.

Applicant argues that there is absolutely nothing in Weindorf that remotely suggests a calculating unit configured to calculate a target display brightness of the display unit. As mentioned above the Brightness control system has microprocessors, which can calculate the brightness level. Therefore the microprocessor of the brightness control system can calculate a targeted brightness instead of using a brightness table.

Applicant argues that Weindorf merely teaches a selection between the day mode and the night mode in which the step numbers are based on the night and day luminance adjustment sequences and output values from the photodiode and the logarithmic amplifier. There is therefore, absolutely nothing in Weindorf that suggests

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that when the first mode is selected, the brightness control unit supplies a first brightness control signal changing the current display lightness by a predetermined brightness which is smaller than a difference between the current display brightness and the target brightness.

This limitation is broad and can be read as (changing the current display brightness from 82.95 nits at step 2 to 86.62 nits at step 3, which is a change of 3.67 nits which value is smaller than the difference between the logarithmic amplifier of step 2 at 34 and step 3 at 38, which is 4). The same applies for the night mode wherein the change in brightness is in accordance with the change of 4 points in the logarithmic value of TABLE 1). Claims 20 and 25 would overcome the prior art of Weindorf.

Inquiry

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PEGEMAN KARIMI whose telephone number is (571)270-1712. The examiner can normally be reached on Monday-Thursday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pegeman Karimi/
Examiner, Art Unit 2629
December 19, 2008

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629